

HALOGEN-FREE FIRE RETARDANT SYSTEM FOR LOW HEAT RELEASE POLYMERS**Abstract of the Disclosure**

An intumescent fire retardant system for making polymeric moldings that is halogen-free and provides fire shielding, thermal shielding and a low heat release rate. The intumescent fire retardant system of the present invention comprises, on the basis of 100 parts by weight blended mixture, 20-45 parts of a polymeric binder based on high density polyethylene and an α -olefin-containing copolymer, such as linear low density polyethylene, and 5-25 parts of a nitrogenous gas-generating agent, 10-30 parts of a water vapor-generating agent, 1-5 parts of an antioxidant, and 0-15 parts of a reinforcing agent. The fire retardant system of the present invention is essentially halogen-free.